

WHAT IS CLAIMED IS:

1. A modem for a Digital Subscriber Line (DSL) employing Time-Division Multiplexing (TDM) protocol comprising:
 - a line driver having inputs for receiving a transmit signal and outputs for connection to a twisted pair line;
 - means for connecting the twisted pair line to a receiver;
 - load resistors coupled intermediate the line driver outputs and the receiver connecting means;
 - means for terminating the load resistors in a low noise termination responsive to a switching signal; and
 - means for generating the switching signal.
2. A modem for a DSL as defined in claim 1 wherein the means for terminating the load resistors comprises a means for driving the line driver outputs into saturation.
3. A modem for a DSL as defined in claim 2 wherein the means for driving the line driver outputs into saturation comprises:
 - a first transistor having its drain connected to a first input of the line driver and its emitter connected to ground and its gate connected to the means for generating the switching signal;
 - a second transistor having its drain connected to a second input of the line driver and its emitter connected to ground and its gate connected to the means for generating the switching signal; and
 - means for isolating the inputs of the line driver.
4. A modem for a DSL as defined in claim 1 wherein the means for terminating the load resistors comprises:
 - a balancing impedance interruptibly connected across the load resistors;
 - a switch responsive to the means for generating the switching signal for interrupting the circuit across the balancing impedance.

5. A modem for a DSL as defined in claim 1 wherein the means for generating the switching signal is a timing logic synchronous with a receive time slot of the TDM protocol.